



DOCUMENT 259-99

**GPS EQUIPMENT AND SOFTWARE DATA BASE
FOR THE DOD TEST RANGES**

WHITE SANDS MISSILE RANGE
KWAJALEIN MISSILE RANGE
YUMA PROVING GROUND
DUGWAY PROVING GROUND
ABERDEEN TEST CENTER
NATIONAL TRAINING CENTER

ATLANTIC FLEET WEAPONS TRAINING FACILITY
NAVAL AIR WARFARE CENTER WEAPONS DIVISION
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
NAVAL UNDERSEA WARFARE CENTER DIVISION, NEWPORT
PACIFIC MISSILE RANGE FACILITY
NAVAL UNDERSEA WARFARE CENTER DIVISION, KEYPORT

30TH SPACE WING
45TH SPACE WING
AIR FORCE FLIGHT TEST CENTER
AIR ARMAMENT CENTER
AIR WARFARE CENTER
ARNOLD ENGINEERING DEVELOPMENT CENTER
GOLDWATER RANGE
UTAH TEST AND TRAINING RANGE

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DOCUMENT 259-99

**GPS EQUIPMENT AND SOFTWARE DATA BASE
FOR THE DOD TEST RANGES**

JULY 1999

Prepared by

**ELECTRONIC TRAJECTORY MEASUREMENTS GROUP
RANGE COMMANDERS COUNCIL**

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U.S. Army White Sands Missile Range
New Mexico 88002-5110**

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INTRODUCTION

The information provided in this document is to be used as a guide only. It is recommended that each range be contacted individually about their resources on hand if there are any questions relating to their listed assets. It is more than likely that the resources identified here in this document have changed since its printing.

30th SPACE WING (30 SW)
VANDENBERG AFB, CA

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	30th Space Wing		
SERVICE AFFILIATION:	Air Force		
RANGE ADDRESS:	Vandenberg AFB, CA		
RANGE POINT-OF-CONTACT (POC) NAME:			
POC PHONE NUMBER:			
POC FAX NUMBER:			
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
	Austron	2200	4
	IEC	RR/PT	3
GPS/Timing Receiver	Kinometrics	GPS-DC	20

AIR WARFARE CENTER (AWFC)
NELLIS AFB, NV

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Air Warfare Center		
SERVICE AFFILIATION:	Air Force		
RANGE ADDRESS:	Nellis AFB, NV		
RANGE POINT-OF-CONTACT (POC) NAME:			
POC PHONE NUMBER:			
POC FAX NUMBER:			
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
Timing Receiver	Datum	9390	1
GPS/Timing Receiver	Kinometrics	GPS-DC	1

746th TEST SQUADRON
HOLLOMAN AFB, NM

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Holloman AFB		
SERVICE AFFILIATION:	Air Force		
RANGE ADDRESS:	746th Test Squadron, Holloman AFB, NM		
RANGE POINT-OF-CONTACT (POC) NAME:	Archie Crawford		
POC PHONE NUMBER:	DSN: 349-1741 Comm: (505) 679-1741		
POC FAX NUMBER:			
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
ARDS FRP Pod	Metric	AN/ARQ-52B(V)2	2
ARDS LRIP Plate	IEC	AN/ARQ-52(V)8	4

AIR FORCE FLIGHT TEST CENTER (AFFTC)
EDWARDS AFB, CA

RANGE IDENTIFICATION DATA/INFORMATION				
RANGE NAME:		412TW/EWR Edwards AFB		
SERVICE AFFILIATION:		Air Force		
RANGE ADDRESS:				
RANGE POINT-OF-CONTACT (POC) NAME:		Larry Trankovich		
POC PHONE NUMBER:		800-779-0526, ext: 56275		
POC FAX NUMBER:				
POC E-MAIL ADDRESS:				
RANGE GPS TSPI EQUIPMENT INVENTORY				
HARDWARE EQUIPMENT (common name)		VENDOR	MODEL NUMBER	QUANTITY
ARDS LRIP Pod		IEC	AN/ARQ-52A(V)2	24
ARDS GNP Pod (upgrade to LRIP pods)		Metric	GNP	(24)

AFFTC (continued)

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	EDWARDS AFB, CA		
SERVICE AFFILIATION:	AIR FORCE		
RANGE ADDRESS:	412 TW/TSRE, 306 E. POPSON, EDWARDS AFB, CA 93524		
RANGE POINT-OF-CONTACT (POC) NAME:	TERRY POWELL		
POC PHONE NUMBER:	(805) 277-6120 / DSN 527-6120		
POC FAX NUMBER:	(805) 277-5377		
POC E-MAIL ADDRESS:	powellt@tsr.edwards.af.mil		
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
ARDS LRIP Pod	IEC	AN/ARQ-52A(V)2	8
ARDS FRP Pod	Metric	AN/ARQ-52B(V)2	(10, FY97-98)
ARDS GNP Pod	Metric	GNP	(4, FY97-98)
ARDS LRIP Plate	IEC	AN/ARQ-52(V)8	3
ARDS FRP Plate	Metric	AN/ARQ-52B(V)8	(2, FY97-98)
ARDS GNP Plate	Metric	GNP	0
ZY-12 Reference Receiver	Ashtech	ZY-12	(1, FY-97)
Z-12 Receiver	Ashtech	Z-12	2
ZY-12 Receiver	Ashtech	ZY-12	(2, FY-97)
AOA Refr Rcvr	Allen Osborne Associates	SNR-12	1
PLGR (Tan)	Rockwell		2
PLGR+ (Green)	Rockwell		7
PLGR+ 96	Rockwell	(WAGE)	(2, FY-97)
CACR	NavSymm	XR5M, Ver 3.7	(3, FY-97)
SPC	NavSymm	SPC, Ver 3.7	(3, FY-97)
CACR-Data Link	NavSymm	DR5-96S	3
EGI-Gainer	Honeywell	H746G, Ver TSPI	2
IFSSR-Gainer	Metric	IFSSR, Ver -2	2
GRBI	CSC	GRBI	1
GPS Timing Receiver (Master)	Austron	2200A	3
GPS Timing Receiver (Remote)	Austron	2201A	8
Explorer	Eagle	000-0094-37	1

AIR ARMAMENT CENTER (AAC)
EGLIN AFB, FL

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	AAC, Eglin AFB		
SERVICE AFFILIATION:	Air Force		
RANGE ADDRESS:	46 th Test Wing/TSRI, 303 N. 7th St, Suite 109, Eglin AFB, FL 32542-5641		
RANGE POINT-OF-CONTACT (POC) NAME:	Raymond Sanders		
POC PHONE NUMBER:	(904) 882-2338 DSN: 872-2338		
POC FAX NUMBER:	(904) 882-6509 DSN: 872-6509		
POC E-MAIL ADDRESS:	sandersw@eglin.af.mil		
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
MTACS-HDIS Pod (Short Shell)	IEC	LRIP	7
MTACS FRP Pod	Metric	AN/ARQ-52B(V)2	7
ARDS LRIP Plate	IEC	AN/ARQ-52(V)8	5
ARDS FRP Plate	Metric	AN/ARQ-52B(V)8	1
ARDS FRP Plate w/o DLT	Metric	FRP	2
ARDS FRP DLT	Metric	FRP	11
ARDS FRP DLGS	Metric	FRP	1
ARDS FRP M/RGS (Rubidium)	Metric	FRP	2
ARDS FRP M/RGS (standard)	Metric	FRP	7
ARDS FRP HDIS Receiver	Metric	FRP	2
ARDS FRP DLT AC/DC converter	Metric	FRP	4
HDIS RR/P	IEC	AN/GRQ-28B	1
ARDS-DRU	IEC	LRIP	4
ARDS FRP IRU	Metric	FRP	2
IDRU	IEC	LRIP	1
3A	Collins	3A	3
GPS Engine	Magnavox		18
MX9112	Magnavox		2
Turbo Engine	Magnavox		3
CACR/SPC	NAVSTAR		1
TNL 2000	Trimble		1
5000 D	Magellan	5000 D	1
GPS-40	Garmin		2
DRB-100	Garmin		1
CMC-1200	Canadian Marconi		5

UTAH TEST AND TRAINING RANGE (UTTR)
HILL AFB, UT

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	388 RS UTTR , HILL AFB		
SERVICE AFFILIATION:	Air Force		
RANGE ADDRESS:	Hill AFB, UT		
RANGE POINT-OF-CONTACT (POC) NAME:	Dee Hildt		
POC PHONE NUMBER:	(801) 777-9552/4333		
POC FAX NUMBER:			
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
ARDS LRIP Pod	IEC	AN/ARQ-52A(V)2	1
ARDS FRP Pod	Metric	AN/ARQ-52B(V)2	4
ARDS FRP DLGS	Metric	FRP	1
ARDS LRIP DLC/P	IEC	LRIP	1
ARDS LRIP M/RGS (standard)	IEC	LRIP	5
ARDS FRP M/RGS (Rubidium)	Metric	FRP	2
ARDS LRIP RR/P	IEC	LRIP	1
ARDS FRP HDIS Receiver	Metric	FRP	1
ARDS FRP DLT	Metric	FRP	1
ARDS LRIP Control Display Unit (CDU)	IEC	HUNTER	1
ARDS FRP Control Display Unit (CDU)	Metric	FC486	3

NAVAL AIR WARFARE CENTER WEAPONS DIVISION (NAWCWD (CL))
CHINA LAKE, CA

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Naval Air Warfare Center Weapons Division, China Lake		
SERVICE AFFILIATION:	Navy		
RANGE ADDRESS:	Code: 522420D China Lake, CA 93555		
RANGE POINT-OF-CONTACT (POC) NAME:	Larry Galvin		
POC PHONE NUMBER:	(760) 939-5294 DSN: 437-5294		
POC FAX NUMBER:	(760) 939-5324		
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
ARDS LRIP Pod (2 with flash memory)	IEC	AN/ARQ-52A(V)2	5
ARDS FSED Pod (2 with flash memory)	IEC	FSED	9
ARDS FRP Pod	Metric	AN/ARQ-52B(V)2	23
ARDS LRIP Plate	IEC	AN/ARQ-52(V)8	1
ARDS FRP Plate	Metric	AN/ARQ-52B(V)8	6
ARDS FRP Plate w/o DLT	Metric	FRP	2
ARDS FRP DLT Plate	Metric	FRP	21
ARDS LRIP M/RGS	IEC	LRIP	12
ARDS FRP M/RGS (standard)	Metric	FRP	4
ARDS FRP M/RGS (Rubidium)	Metric	FRP	2
ARDS FSED DLS	IEC	FSED	1
ARDS LRIP DLS	IEC	LRIP	1
ARDS FRP DLGS	Metric	FRP	2
CACR & SPC	NAVSTAR	CACR & SPC	15
PLGR	Rockwell	AN/PSN-11	5
PLGR+	Rockwell	AN/PSN-11, (V) 1	10
ARDS LRIP Control Display Unit (CDU)	Husky Computers, Ltd	HUNTER	6
ARDS FRP Control Display Unit (CDU)	Metric	FC486	4
BPA Tester	IEC	LRIP	1
Data Retrieval Unit	IEC	GRID 7518000	3
Reference Receiver Processor	IEC	7514200	2
Reference Receiver	Metric	FRP	2
Generic Range Interface Module (GRIM)	IEC	1 LRIP & 1 FSED	2
Software Burn-in Station	Metric	FRP	2
Software Burn-in Station	IEC	LRIP	1
Power Interface Unit	Metric	FRP	2

NAVAL AIR WARFARE CENTER WEAPONS DIVISION
CHINA LAKE, CA (continued)

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Naval Air Warfare Center Weapons Division (Simulation Lab)		
SERVICE AFFILIATION:	Navy		
RANGE ADDRESS:	Code: 471120D China Lake, CA 93555		
RANGE POINT-OF-CONTACT (POC) NAME:	Ronald Brigham		
POC PHONE NUMBER:	(760) 939-1441 DSN: 437-1441		
POC FAX NUMBER:			
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
Reference Receiver (12 Ch)	Trimble		1
Reference Receiver (3 S)	Rockwell	3S	1
Reference Receiver (12 Ch)	Allen Osborne Asso.	SNR 12	1
MAGR	Rockwell-Collins		1
EGI	Litton	LN200	1
Euronav	Magnavox		1
Survey Receiver	Ashtech		2
TANS	Trimble		4
PLGR	Rockwell		3
Promark 10, 5 & 5000D	Magellan		6
Receiver	Garmin		1
Satellite Simulator (12 Ch)	Stanford Telecom	7200	1
Satellite Simulator (24 Ch)	IEC		1
Jammer Suite	In-House		1

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:		Naval Air Warfare Center Weapons Division, China Lake	
SERVICE AFFILIATION:		Navy	
RANGE ADDRESS:		Code: 524500D China Lake, CA 93555	
RANGE POINT-OF-CONTACT (POC) NAME:		Ken Davis	
POC PHONE NUMBER:		(760) 939-6768 DSN: 437-6768	
POC FAX NUMBER:			
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
GPS Programmable Time System	Datum Inc, Timing Division	9701-01-5	10

NAVAL UNDERSEA WARFARE CENTER
ATLANTIC UNDERSEA TEST AND EVALUATION CENTER (AUTEC)
WEST PALM BEACH, FL

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:		Atlantic Undersea Test and Evaluation Center (AUTEC)	
SERVICE AFFILIATION:		Navy	
RANGE ADDRESS:		801 Clematis Street / Code 3814 West Palm Beach, FL	
RANGE POINT-OF-CONTACT (POC) NAME:		Jeff Byrne	
POC PHONE NUMBER:		(561) 832-8566 x7349	
POC FAX NUMBER:		(561) 832-8590	
POC E-MAIL ADDRESS:		byrne@wpb.nuwc.navy.mil	
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
DGPS Reference Locator (Base Station)	Trimble	4000RL	1
Course Acquisition Code Receiver (CACR)	NAVSTAR	CACR	25
Dual Mode Base Station (DMBS)	NAVSTAR	DMBS	2
DGPS Receiver	Magnavox	MX-200	10
DGPS Receiver	Magnavox	MX-300	2
Enhanced Precision Light-weight GPS Receiver (EPLGR)	Rockwell	EPLGR	8
Precision Light-weight GPS Receiver (PLGR)	Rockwell	PLGR	2
Differential Correction Receiver	Accpoint		2
Differential Correction Receiver	Differential Corrections Inc		1
Differential Correction Beacon Receiver	Magnavox	MX-50R	1

NAVAL AIR WARFARE CENTER WEAPONS DIVISION (NAWCWD (PM))
POINT MUGU, CA

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Naval Air Warfare Center Weapons Division, Pt. Mugu		
SERVICE AFFILIATION:	Navy		
RANGE ADDRESS:	521 9th Street, Pt. Mugu, CA 93042-5001		
RANGE POINT-OF-CONTACT (POC) NAME:	Ron Smith / Code: 522110E		
POC PHONE NUMBER:	(805) 989-8148 DSN 351-		
POC FAX NUMBER:	(805) 989-5210		
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
ARDS LRIP Pod	IEC	CACR	249
ARDS FRP Pod	Metric	AN/ARQ-52B(V)2	16
ARDS LRIP Plate	IEC	AN/ARQ-52(V)8	2
ARDS FRP Plate	Metric	AN/ARQ-52B(V)8	1
LRIP HDIS RR/P	IEC	AN/GRQ-28B	4
EATS Pod	IEC	AN/ARQ-52(V)	8
EATS Plate	IEC	AN/ARQ-52(V)12	7
EATS Pod	Metric	AN/ARQ-52B(V)1	8
EATS Plate	Metric	AN/ARQ-2B(V)12	1
CACR/SPC	NAVSTAR	CACR/SPC	25
PLGR+	Rockwell	PLGR+	5
5000 D	Magellan	5000 D	1
AOA Refr Rcvr	Allen Osborne Associates		1
Z-12 Refr Rcvr	Ashtech	Z-12	3

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION (NAWCAD (PR))
PATUXENT RIVER, MD

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Naval Air Warfare Center Aircraft Division, Patuxent River		
SERVICE AFFILIATION:	Navy		
RANGE ADDRESS:	Patuxent River, MD		
RANGE POINT-OF-CONTACT (POC) NAME:	Ken Clarke or Duncan Selph		
POC PHONE NUMBER:	(301) 342-1206/DSN 342-1206		
POC FAX NUMBER:	(301) 342-1190		
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
ARDS LRIP Pod	IEC	AN/ARQ-52A(V)2	8
ARDS FRP Pod	Metric	AN/ARQ-52B(V)2	16
ARDS LRIP Plate	IEC	AN/ARQ-52(V)8	5
ARDS FRP Plate	Metric	AN/ARQ-52B(V)8	8
CACR/SPC	NAVSTAR	CACR/SPC	25
PLGR+	Rockwell	PLGR+	5
LRIP HDIS RR/P	IEC	AN/GRQ-28B	2
Z-12 Refr Rcvr	Ashtech	Z-12	2
Novtel	Millins	LRIP	3
DLC/P	IEC	LRIP	1
DLC/P	Metric	FRP	1

ABERDEEN TEST CENTER (ATC)
ABERDEEN PROVING GROUND, MD

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Aberdeen Proving Ground		
SERVICE AFFILIATION:	Army		
RANGE ADDRESS:	STEAC-TE-I, Bldg 350, APG, MD 21005-5059		
RANGE POINT-OF-CONTACT (POC) NAME:	Mike Shellem		
POC PHONE NUMBER:	DSN 298-9489		
POC FAX NUMBER:	DSN 298-4116		
POC E-MAIL ADDRESS:	mshellem@atc.army.mil		
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
Sensor II GPS Receiver	Ashtech	Sensor II	6
G-12 GPS Receiver	Ashtech	G-12	24
Z-12 GPS Receiver	Ashtech	Z-12	4
Trimble 4000ST GPS Receiver	Trimble	4000ST	4
Trimble 4000RL GPS Receiver	Trimble	4000RL	1
Trimble Site Surveyor SSI GPS Receiver	Trimble	4000SSI	4
Trimble Site Surveyor SSE GPS Receiver	Trimble	4000SSE	1
Rockwell Micro Tracker LP GPS Receiver	Rockwell International	Micro Tracker LP	6
Trimble 7400 MSI GPS Receiver	Trimble	7400 MSI	2
Trimble Geo Explorer	Trimble	Explorer	2
Magellan 5000	Magellan	5000	1

ELECTRONIC PROVING GROUND (EPG)
FORT HUACHUCA, AZ

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Electronic Proving Ground		
SERVICE AFFILIATION:	Army		
RANGE ADDRESS:	Ft. Huachuca, AZ		
RANGE POINT-OF-CONTACT (POC) NAME:	Jack Underwood		
POC PHONE NUMBER:	DSN 821-8087		
POC FAX NUMBER:	DSN 821-8018		
POC E-MAIL ADDRESS:	underwoj@epg.army.mil		
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
PLM	IEC	PLM	1
PLM5	IEC	PLM5	8
PLM5M	IEC	PLM5M	9
GT LO PWR	STEL	GT	2
ARDS FRP Plate	Metric	AN/ARQ-52B(V)8	4
ARDS FRP M/RGS (Rubidium)	Metric	FRP	1
ARDS FRP RR	Metric	FRP	1
ARDS FRP Control Display Unit (CDU)	Metric	FC486	1

TEST & EXPERIMENTATION COMMAND
TEST & EVALUATION SUPPORT ACTIVITY (TEXCOM TESA)
FORT HOOD, TX

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Test and Experimentation Command (HQ TEXCOM)		
SERVICE AFFILIATION:	Army		
RANGE ADDRESS:	Fort Hood, TX 76544-5068		
RANGE POINT-OF-CONTACT (POC) NAME:	Flip Harvey		
POC PHONE NUMBER:	(254) 288-1938		
POC FAX NUMBER:	(254) 288-1649		
POC E-MAIL ADDRESS:	harveyrobert@texcom-mail.army.mil		
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
Coarse Acquisition Code Receiver (CACR)	NavSymm	CACR	249
Dual Mode Base Station (DMBS) Refr Recr	NavSymm	DMBS	9
Precise Lightweight GPS Receiver (PLGR)	Rockwell	PLGR	34
Xybion	Xybion	Xybion	53
Trimble Advanced Navigation Sensor (TANS) Vector	Trimble	TANS Vector	9
Scout	Trimble	Scout	12
PVT-6	Motorola	PVT-6	51
Z-12 Refr Rcvr	Ashtech	Z-12	3
Datachron	Datachron	3650	3
Truetime	Truetime	468	2
Truetime	Truetime	50	2
Truetime	Truetime	XL-DC	2

WHITE SANDS MISSILE RANGE (WSMR)
WHITE SANDS MISSILE RANGE, NM

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:		WSMR	
SERVICE AFFILIATION:		ARMY	
RANGE ADDRESS:		White Sands Missile Range, NM 88002	
RANGE POINT-OF-CONTACT (POC) NAME:		L. Garcia	
POC PHONE NUMBER:		(505) 678-1025 DSN 258	
POC FAX NUMBER:		(505) 678-0237 DSN 258	
POC E-MAIL ADDRESS:		lgarcia@tecnet1.jcte.jcs.mil	
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
ARDS LRIP Pod	IEC	AN/ARQ-52A(V)2	9
ARDS FRP Pod	Metric	AN/ARQ-52B(V)2	14
ARDS FRP Plate	Metric	AN/ARQ-52B(V)8	6
ARDS FRP Plate w/o DLT	Metric	FRP	10
ARDS FRP DLT Plate	Metric	FRP	15
ARDS FRP DLT	Metric	FRP	2
ARDS FRP DLGS	Metric	FRP	2
ARDS FRP M/RGS (Rubidium)	Metric	FRP	4
ARDS FRP Reference Receiver	Metric	FRP	1
ARDS FRP HDIS Receiver Test Set	Metric	FRP	5
ARDS FRP Control Display Unit (CDU)	Metric	FC486	2
Software Burn-in Station	Metric	FRP	5
ARDS FRP GPS Antenna Test Box	Metric	FRP	5
ARDS FRP Battery Power Assembly Tester	Metric	FRP	5
Power Interface Unit	Metric	FRP	5
ARDS FRP Antenna Shroud	Metric	FRP	5
CACR	NAVSTAR		Approx#195
LRIP HDIS RR/P	IEC	AN/GRQ-28B	7
Serial to Parallel Converter (SPC)	NAVSTAR		50
Ground Stations (MRGS)			4
Rack Mounted Pentium			2
Monitor's	Tatung		2
Digital Vax 4000-200 (DLS)			1
Monitor	VT340		1
Digital TSZ07 Tape Deck		MUB0,MUB1	2
Monitor	SGI Indigo		1
Monitor, CTX			1
Pentium Pro	Texas Micro		1
Monitor, Sony Triniton	Sony		1
KGR-68	Microconn Corp		2
Fiber Optic Bus Interface 4020	Canoqa Parking		2
ASYNC Router V.34, Black Box			1
HP Laserjet			1

WSMR (continued)

HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
Smart UPS 2200			3
Cisco 2500 Router			2
HP Bridge RB			2
Connect FT1 DSU/CSU			2
T-1 ESF CSU/DSU Cray DCP3552			1
DLC Vax 4 (Spare)			1
Pentium bu V-Tron			1
Asante ponc Hub/6			1
Addtron/4 Hub			1
Monitor SGI			1
Vax 4000-200, DLS			1
IBM Gearbox	IBM	800	1
IBM 486	IBM		1
GPS Reference Receiver			1
Smart UPS 2100			1
Rec VT420 Monitor			1
Visual 220 Monitor			1
BSI 486 Rackmount			1
Kentrox, 77101-SIU			7
Kentrox, 77120-L2			12
Coastlown, FDLF			10
Coastlown, o-1 LIU			10
Coastlown, TI-2 LIU			10
Coastlown, CCU			10
Coastlown, STB			10
Coastlown, 4WE&M			10
Coastlown, SDCU			10
Coastlown, ADCU			11
Coastlown, PS48			10
Coastlown, CSU1F			10
Husky CDU			1
Lockheld Speaker phones intercom		FA-BA-JA-JA-001	1
Monitor Oec, VT320			1
GPS IEC Antenna Assembly			1
S61 Onyx			1
Transceiver			1
Antenna Assy			1
Capacitor, Fixed			1
Fan, Saucer			1
Suppressor, V			1
Filter			1
Switch, toggle			1
Circuit Breaker			1
Lamp, Cartridge			1
Circuit Breaker			1
Meter			2
Lamp, Cartridge			5
Light, Indicator			5
Switch, Toggle			1
Filter			1
Power Supply			1
Bias Tee Assy			1

WSMR (continued)

HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
Circuit Breaker			1
Backplane Assy			1
Rcvr Btry Pack			1
Battery Unit			3
Gasket, Conn			10
Gasket, EMI			10
CCA, BTRY PWR			1
RFDC MDL ASSY			1
Turbo Control			1
Input/Output			1
Oscillator			1
Ant, Airborne			1
Diode			1
Preamplifier			2
GPS Antenna			1
Umbilical Assy			1
Diode, LED			2
INRTL REF UNIT			1
Power Supply			1
Transceiver			1
Converter, AC/DC			1
EMI, Seal, O-Ring			10
Input/Output # 2			1
Gasket, EMI			10
Gasketing Matl			10
Gasketing Matl			10
Gasketing Matl			10
O-Ring			10
Rigid/Flex Assy			1
Switch			1
Meter, T Totlz			1
Switch, RF			2
Exp Mod Frame			2
CCA, XMTR			1
Panel Assy			1
KIU P/S			1
CCA, Receiver			1
CCA, Interface			1
Switch, Toggle			1
Switch			1
Meter, T Totlz			1
Filter			1
Resistor, Fixed			1
Resistor			1
Gasketing Matl			5
Oscillator Assy			1
Rubidium STD			1
Switch, Coaxial			1
Relay			1
Bias Tee			1

WSMR (continued)

HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
TDARDS-Participant Instrumentation Package (PIP)			10
AIM-9 Pod			3
MQ-107 Drone Plate			3
PC Computer			3
Novatel Rwf Receiver			3
Motorola Rnet Modem Transceiver			3

YUMA PROVING GROUND (YPG)
YUMA, AZ

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:	Yuma Proving Ground (YPG)		
SERVICE AFFILIATION:	Army		
RANGE ADDRESS:	YPG, Yuma, AZ 85365		
RANGE POINT-OF-CONTACT (POC) NAME:	Greg Beaubier		
POC PHONE NUMBER:	(520) 328-6160 DSN: 899-6160		
POC FAX NUMBER:	(520) 328-6233 DSN: 899-6233		
POC E-MAIL ADDRESS:	greg.beaubier@yuma-exch1.army.mil		
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
LRIP HDIS RR/P	IEC	LRIP	1
FRP HDIS RR/P	Metric	FRP	1
ARDS LRIP Plate	IEC	AN/ARQ-52(V)8	2
ARDS FRP Plate	Metric	AN/ARQ-2B(V)8	4
ARDS FRP DLT Plate	Metric	FRP	5
ARDS FRP DLGS	Metric	FRP	1
ARDS FRP M/RGS (Rubidium)	Metric	FRP	1
ARDS FRP Reference Receiver	Metric	FRP	1
ARDS FRP Control Display Unit (CDU)	Metric	FC486	5
CACR/SPC	NAVSTAR		2
PLGR+	Rockwell		5
AOA Refr Rcvr	Allen Osborne Associates		1
Z-12 Refr Rcvr	Ashtech	Z-12	3
	Leica	SR9500	2
	Trimble	4000 SSI	4
Vehicle Tracking System (VTS)	Trimble		1
	Trimble	Trimpack	1
	Trimble	Scout	2
	Trimble	Pathfinder	3

KWAJALEIN MISSILE RANGE (KMR)

RANGE IDENTIFICATION DATA/INFORMATION			
RANGE NAME:		Kwajalein Missile Range	
SERVICE AFFILIATION:		Army	
RANGE ADDRESS:			
RANGE POINT-OF-CONTACT (POC) NAME:			
POC PHONE NUMBER:			
POC FAX NUMBER:			
POC E-MAIL ADDRESS:			
RANGE GPS TSPI EQUIPMENT INVENTORY			
HARDWARE EQUIPMENT (common name)	VENDOR	MODEL NUMBER	QUANTITY
	Ashtech		2
Timing Receiver	Datum	9390-5036	5
Timing Receiver		9390-55164	14
Timing Receiver		9390-5540	13
BMT	IEC	Translators	2
TPS (SVT)	IEC	Translators	2
HI PWR	STEL	GT	9

RANGE SOFTWARE LISTING

GPS TSPI SOFTWARE APPLICATIONS

Software POCs Name		POCs Phone		Comment								
RANGE	SOFTWARE (common name)	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOV'T OR COMMERCIAL PRODUCT (G/C)	VENDOR (if commercial product)	AVAILABILITY (of software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
APG	WAM Multi-Player Data Acquisition System	Vehicle tracking with display based on Ashtech Sensor II and ADOCS	C	Window NT, 100 MHz Pentium with ADOCS on vehicles	15 Player Vehicles tracking, realtime display and data logging	No	Government	N/A	Now		ADOCs SLIP	NO
APG	Ashtech "Evaluate" Ver 3.0	Data display and analysis	Executable Only	Windows 95, 486/66 MHz	Facilities accuracy testing of Ashtech Sensor II and G-12 GPS Receivers	Yes	Government	Ashtech	Now		NMEA-183	Yes
Software POCs Name		POCs Phone		Comment								
RANGE	SOFTWARE (common name)	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOV'T OR COMMERCIAL PRODUCT (G/C)	VENDOR (if commercial product)	AVAILABILITY (of software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
Eglin AFB	ARDS ACP Software				Used to Operate DLC/P					DLC/P		
Eglin AFB	File Chop				Allows us to break up large SSR data files					CDU		
Eglin AFB	RAIPO CDU Software									RRP		
Eglin AFB	RAIPO RRP Software											
Software POCs Name		POCs Phone		Comment								
CSC		(805) 277-		GPS Data Analysis								
RANGE	SOFTWARE (common name)	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOV'T OR COMMERCIAL PRODUCT (G/C)	VENDOR (if commercial product)	AVAILABILITY (of software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
Edwards AFB	PNAV	Analysis			Z12 GPS Receiver Analysis Software		Commercial	Ashtech	Now		Z-12/ZY-12	
Edwards AFB	GPSCADD						Commercial	Ashtech	Now			
Edwards AFB	PRISM						Commercial	Ashtech	Now			
Edwards AFB	GATR	Analysis						TASC	Now	HDIS		
Edwards AFB	MOSES 6.0	Postflight Data Reduction						CSC	Now	Multi-sensors		
Edwards AFB	GPS.exe	Data Collection						CSC	Now	PLGR/Palmtop		
Edwards AFB	PREPI.exe	Pre-data analysis						CSC	Now			
Edwards AFB	PREP_F16.exe	Data Collection						CSC	Now			
Edwards AFB	Explorer Software	Upload/Download Data	Executable Only	IBM PC	Used to upload/download data collected with GPS receivers	Yes	Commercial	NAVTECH or LEI Accessories	Now	Eagle Explorer and other receivers		Yes
Software POCs Name		POCs Phone		Comment								
RANGE	SOFTWARE (common name)	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOV'T OR COMMERCIAL PRODUCT (G/C)	VENDOR (if commercial product)	AVAILABILITY (of software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
UTEC		In-House-Only										

SOFTWARE NAME	POC's Name	POC's Phone #	SOFTWARE RANGE	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform, requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOVT OR COMMERCIAL PRODUCT (G/C)	VENDOR (if commercial product)	AVAILABILITY (of software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
Ronald Brigham	471120D	(760) 939-1441 DSN: 437-1441								None				
China Lake	Mathmatica			Data Analysis		PC	Mathematical Analysis Program	Yes	C		By Purchase	Any	Any	Yes
China Lake	Mathlab			Data Analysis		PC	Mathematical Analysis Program	Yes	C		By Purchase	Any	Binary Files	Yes
China Lake	Origin			Plotting and Analysis		PC	Plotting with some analysis	Yes	C	Microcal	By Purchase	Any	ASCII/Excel Files	Yes
China Lake	MOSES			Data Reduction	Fortran	PC	Perform post differential corrections and IRU smoothing	No	G	N/A	Available	RAIPO, Allen Osborne, JPO suite of equipment	RAIPO, Allen Osborne, JPO suite of equipment	Some
Software POC's Name	POC's Code	POC's Phone #												
Dieter Weik	522420D	DSN: 437-1395												
China Lake	Data Link Processor			Operations	FORTAN	VAX 4200-200/VMS ver. 5.5-3	Provides interface to Host Range Facility, KGR-66, DLC, tape drives, NCP, RRP, and Ethernet.	no	C	IEC	Developed under contract	ARDS pods, plates	DLS, EATS, GRDCUS, CACR	yes
China Lake	Data Link Controller			Operations	FORTAN	VAX 4200-200/VMS ver. 5.5-3	Controls time division multiple access protocol used by the DLTs to share the L-band channel.	no	C	IEC	Developed under contract	ARDS pods, plates	DLS, EATS, GRDCUS, CACR	yes
China Lake	Message Processor			Operations	ASM86	IBM Gearbox model 800 industrial computer	Interprets and formats messages. Detects duplicate and missed messages.	no	C	IEC	Developed under contract	ARDS pods, plates	DLS, EATS, GRDCUS, CACR	yes
China Lake	MONSYS / GMS			Display	C/C++	IBM Compatible Pentium	Monitors Ethernet for GPS specific messages, and displays pertinent message data in real-time.	no	C	EWA	Developed under contract	ARDS pods, plates	DLS, EATS, GRDCUS, CACR	not at this time
China Lake	Translator			Operations		IBM Compatible PC	Used to copy GPS messages from Ethernet to PC disk.	no	C	TASK	Available	ARDS pods, plates	DLS, EATS, GRDCUS, CACR, NMEA, Rockwell	no

Software POC Name	POC Code	POC Title	Comments	Range ARDS Firmware								
Dieter Weik	52420D	DSN: 437-1395										
RANGE	SOFTWARE (common name)	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOVT OR COMMERCIAL PRODUCT (G/C)	VENDOR (if commercial product)	AVAILABILITY (software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
China Lake	CNP.EXE	Embedded s/w	Assembly	TCNP CCA	Executable for HDIS Control Navigation Processor	no	C	IEC	contract	HDIS receiver	EATS, ARDS, GRDCUS	no
China Lake	DLOAD.EXE	Embedded s/w	Assembly	MicroVAX	Used to download new versions of executables	no	C	IEC	contract	HDIS receiver	EATS, ARDS, GRDCUS	no
China Lake	BEXEC_20.EXE	Embedded s/w	Assembly	TCNP CCA	Used to download new versions of executables	no	C	IEC	contract	HDIS receiver	EATS, ARDS, GRDCUS	no
China Lake	EXEC_20.EXE	Embedded s/w	Assembly	TCNP CCA	Used to download new versions of executables	no	C	IEC	contract	HDIS receiver	EATS, ARDS, GRDCUS	no
China Lake	FSSRR.IMG	Embedded s/w	Assembly		Firmware for Flash Memory Module Assembly	no	C	IEC	contract	HDIS receiver	EATS, ARDS, GRDCUS	no
China Lake	RFMIE.X	Embedded s/w	Assembly	IOP 2 CCA	Executable for IOP2 CCA	no	C	IEC	contract	HDIS receiver	EATS, ARDS, GRDCUS	no
China Lake	TKIO.X	Embedded s/w	Assembly	TKIO CCA	Executable for TKIO CCA	no	C	IEC	contract	HDIS receiver	EATS, ARDS, GRDCUS	no
Software POC Name	POC Code	POC Title	Comments	Data Analysis								
Eric Senour	52520E	(805) 989-4796 DSN: 437-1395										
RANGE	SOFTWARE (common name)	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOVT OR COMMERCIAL PRODUCT (G/C)	VENDOR (if commercial product)	AVAILABILITY (software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
Point Mugu	GATR	Data Analysis		PCs running Windows 3.1, 95 or NT	Quick look at GPS data; quality evaluation; allows extraction of plot data into tabular lists.	No	G	TASK	Available		DLS, EATS, GRDCUS, CACR, NMEA, Rockwell	no
Point Mugu	Microsoft Excel	Data Analysis		PCs, Macs	Spreadsheet program	Yes	C	Microsoft	By purchase			yes
Point Mugu	PLGR Software	PLGR Control Software		PC's, 16 Meg RAM	Update and Download Data	No	G	N/A	Available	PLGR and Variants	PLGR	Yes
Point Mugu	MONSYS	Analysis and Display	C++	PC Pentium	Track Display and Message Display	No	G	N/A	Available	ARDS	MONSYS, ARDS,GMS	Yes
Point Mugu	Origin	Plotting and Analysis		PC	Plotting with some analysis	Yes	C	Microcal	By Purchase	Any	ASCII/Excel Files	Yes
Point Mugu	MOSES	Data Reduction	Fortran	PC	Perform post differential corrections and IRU smoothing	No	G	N/A	Available	RAJPO, Allen Osborne, JPO suite of equipment	RAJPO, Allen Osborne, JPO suite of equipment	Some
	Standard TSPI Display	Track Display	Fortran	PC	Displays all forms of TSPI Information as tracks. Limited amount of message breakout.	No	G	N/A	Available	RAJPO, EATS	ARDS, EATS	Some

Data Analysis

(301) 342-1206 DSN: 342-1206

Ken Clarke

NAME	SOFTWARE (common name)	SOFTWARE TYPE (display, data reduction, analysis, etc.)	SOFTWARE LANGUAGE	DESCRIPTION OF HARDWARE (platform requirements)	BRIEF DESCRIPTION OF SOFTWARE (capabilities)	LICENSE REQUIRED (yes/no)	GOVT OR COMMERCIAL PRODUCT (G/C)	VENDOR (If commercial product)	AVAILABILITY (software/documentation to others)	GPS EQUIPMENT SUPPORTED	DATA FORMAT SUPPORTED	USER MANUALS (yes/no)
Pax River	GATR	Data Analysis		PCs running Windows 3.1, 95 or NT	Quick look at GPS data, quality evaluation; allows extraction of plot data into tabular lists.	No	G	TASK	Available		DLS, EATS, GRDCUS, CACR, NMEA, Rockwell	no
Pax River	Microsoft Excel	Data Analysis		PCs, Macs	Spreadsheet program	Yes	C	Microsoft	By purchase			yes
Pax River	MOSES	Data Reduction	Fortran	PC	Perform post differential corrections and IRU smoothing	No	G	N/A	Available	RAJPO, Allen Osborne, JPO suite of equipment	RAJPO, Allen Osborne, JPO suite of equipment	Some
Pax River	MATS	Track Display and Data Reduction	C	VME PSOS Operating Sys	Full Realtime Display and Analysis Software	No	G	N/A	Available	RAJPO, EATS	ARDS, EATS	Some
Pax River	In-House Utilities for ARDS/EATS	Data Reduction	C	PC/Win/Win95/WinNT	Extracts ARDS/EATS/CACR messages and converts to ASCII files. Customer provides .INI format.	No	G	N/A	Available	ARDS/EATS/CA CR	HDIS formats	No
Pax River	GPS Delta Utility	Plotting Utility	C	PC	Calculates Delta's between the solution of two pods.	No	G	N/A	Available	MAAGR 3A, LATR, RAJPO Suite, CACR, TANS	Same as Equipment	No
Pax River	IDL Interactive Data Languages	Post Processing Analysis		PC	Geographical Display and Time/History Display	Yes	C	Research Systems Incor.	By Purchase	RAJPO Suite	ASCII Format	Yes